

REMARKS

Claims 1-3, 9-29, 30-31 and 33-34 are pending in the present application. Claims 4-8, 29 and 32 have been canceled. Claims 1, 9, 17, 27-28 and 31 have been amended.

Claim 1 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Yenaïy et al. (U.S. Patent No. 6,731,426 B2).

Claim 1 has been amended to incorporate the features of dependent claim 4, which the Examiner has stated “would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.” Accordingly, the rejection should be withdrawn and claim 1 should be allowed.

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yenaïy et al in view of Traynor et al. (U.S. Patent No. 6,476,960 B1). Applicant respectfully requests withdrawal of the rejection as dependent claims 2 and 3 should be allowable along with claim 1 for the aforementioned reasons.

Claims 9-27 stand objected to because of informalities. Claims 9 and 27 have been amended to address the Examiner’s concern with respect to an antecedent basis for the term “Er doped” optical fibers. Accordingly, the objection to claims 9-27 should be withdrawn and these claims should be allowable.

Claims 28 and 31 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kitabayashi et al. (U.S. Patent No. 6,563,628 B2).

The present claimed invention relates to an ASE light source that uses rare earth-doped optical fibers as an optical amplification medium to output spontaneous

emission light from the optical fibers, to which excitation lights of different intensities are added to increase the amplification.

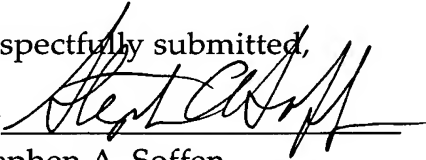
Kitabayashi relates to an optical fiber amplifier which can gain flatness in a wide wavelength band. It also teaches an optical fiber that can change the amount of light absorption and the wavelength dependency of the absorption of the optical fiber according to the power of input light.

Claim 28, as amended, recites the invention as an optical amplifier having “an excitation light source that inputs, to said Tm-doped optical fibers, excitation light corresponding to energy between a $^3F_4 - ^3H_4$ level of Tm ions and excitation light corresponding to energy between a $^3H_6 - ^3F_4$ level.” By using excitation light at these energy levels, it is possible to suppress the degradation of the noise factor (see specification, page 23, lines 16-22). The gain also increases. The optical amplifier of the present claimed invention thus enables the noise factor to be reduced to 8 dB or less in the wavelength band of 1,430 to 1,570 nm. Kitabayashi does not teach or suggest an optical amplifier with these features or attributes.

For the above reasons, applicant respectfully submits that the rejection of claim 28 based on Kitabayashi should be withdrawn. Kitabayashi, likewise, fails to disclose the limitations of amended claim 31, and therefore the rejection of claim 31 should similarly be withdrawn. Dependent claims 30 and 33 should be allowable along with claims 28 and 31.

In view of the above amendment, applicant submits the pending application is in condition for allowance, and such action is earnestly solicited.

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